

Academic Faculty's Teaching Social Networks: What is the Extent of Library Faculty's Inclusion?

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Abstract

Collaboration between academic and library faculty is an important topic of discussion and research among academic librarians. Partnerships are vital for developing effective information literacy education. The research reported in this paper aims to develop an understanding of academic collaborators by analyzing academic faculty's teaching social network. Academic faculty teaching social networks have not been previously described through the lens of social network analysis. A teaching social network is comprised of people and their communication channels that affect academic faculty when they design and deliver their courses. Social network analysis was the methodology used to describe the teaching social networks. The preliminary results show academic faculty were more affected by the channels of communication in how they taught (pedagogy) than what they taught (course content). This study supplements the existing research on collaboration and information literacy. It provides both academic and library faculty with added insight into their relationships.

Introduction

For this study collaboration between academic and library faculty has been investigated by analyzing the teaching social networks of academic faculty at a community college. This investigation supplements the existing research on collaboration for higher education and provides both academic and library faculty with added insight into their relationships. Academic faculty teaching social networks have not been previously described through the lens of social network analysis. This paper thus explores the nature of a teaching social network and focuses on the roles of communication channels in academic faculty's teaching social networks.

Background / Literature Review

When academic faculty design and deliver their courses they are engaged in a teaching social

network. A teaching social network, a new term created for this study, is comprised of people and their communication channels that affect academic faculty when they design and deliver their courses. Communication channels are formal (e.g., scholarly journals and professional development activities) and informal (e.g., personal communication) (Weedman, 1992). An example of a communication channel included in a teaching social network is involvement in team teaching. Through team teaching faculty members become a part of each other's teaching social network. They influence each other in the way they design and deliver the team taught course. Another example of a communication channel in an academic faculty's teaching social network is the process of collaboration when developing assignments with library faculty. The role for library faculty here is to explain search strategies, show how to locate, evaluate, and analyze information related for class assignments. A third example of a communication channel is attendance a professional workshop or reads a professional journal on pedagogy.

Collaboration

Educational theorists have promoted collaboration among faculty as a method to advance intellectual and practical student learning (Haycock, 2007; Lewis & Sincan, 2009). Collaboration through shared goals and objectives between faculty "improves teaching and strengthens academic programs" (Lindman & Tahamont, 2006). It is argued that when academic faculty members collaborate, students benefit from the collaboration by recognizing the connections across or within disciplines (Lewis & Sincan, 2009). Ideas transfer from one course to another as a result of the collaboration (Lewis & Sincan, 2009). Students are exposed to the unique perspectives and strengths of different participating faculty members (Lewis & Sincan, 2009). The experiences of collaboration help faculty to gain knowledge in each other's area of expertise and remove perceived barriers between departments (Lindman & Tahamont, 2006).

Information Literacy Education

Collaboration between academic faculty and library faculty is often conducted for information literacy education. Library faculty argue that collaboration between library and academic faculty is imperative in teaching the concepts of information literacy to students (England & Pasco, 2004). Information literacy education helps students grasp concepts and apply them in multiple disciplines (Barnard, Nash, & O'Brien, 2005). Library faculty believe building partnerships with academic faculty should be their key strategy for teaching information literacy concepts to students (Zhang, 2001).

Information literacy is usually described as the ability to locate, evaluate, and utilize information (ACRL Information Literacy Advisory Committee, September 29, 2006; American Library Association Presidential Committee on Information Literacy, 1989; Chartered Institute of Library and Information Professionals, 2003). Information literacy is commonly identified as an outcome of a community college education. The governing authorities for community colleges, also known as accreditation organizations, recognize information literacy as a student learning outcome and standard that must be met and stressed that collaboration between academic and library faculty is a strategy for meeting this standard (Saunders, 2008). Because of the widespread acceptance of information literacy as a part of higher education, a major theme in the library and education literature has been the need for academic and library faculty to work together (ACRL Information Literacy Advisory Committee, May 22, 2008; Andretta, Pope, & Walton, 2008; Bruce, 1997, 2004; England & Pasco, 2004; Gandhi, 2004; Li, 2007; Mackey & Jacobson, 2005; Sciammarella, 2009; Thompson, 2002; Wijayasundara, 2008; Winner, 1998). When academic and library faculty collaborate together library faculty become a part of academic faculty's teaching social network.

Teaching Social Network

Social networks are groups of people that have common interests, interact with each other, and exchange information between members (Zohar & Tenne-Gazit, 2008). Some examples of personal social networks are family, friends, graduate school, and work. Social networks significantly impact daily lives (Marshall & Foster, 2002; Ribeiro, Paúl, & Nogueira, 2007) and are dynamic throughout life. The social network that this study addresses is a *teaching social network*. A teaching social network is a term used to identify one of the personal social networks of academic faculty that affects the way they design and deliver their courses. This term has been created for this study and has not been identified in library or education literature.

As described earlier a teaching social network is comprised of people and their communication channels that affect academic faculty when they design and deliver their courses. The teaching social network connects people together through collaboration.

Significance of Research

The importance of collaboration between academic and library faculty has been illustrated in the library and education literature (ACRL Information Literacy Advisory Committee, May 22, 2008; England & Pasco, 2004; Winner, 1998; Zhang, 2001). However, academic faculty does not always accept library faculty as integral when developing course curriculum (Arp, Woodard, Lindstrom, & Shonrock, 2006; Winner, 1998). Library faculty are thought of as supportive but not an essential part of the learning process (Winner, 1998). In order to build more successful collaborations, it has been claimed that library faculty need to understand "academic faculty culture" and how to communicate more effectively with academic faculty (Rabinowitz, 2000).

There is a significant body of research dedicated to collaboration between academic and library faculty (Bowler & Street, 2008; Callison, Budny, & Thomes, 2005; Carter & Daugherty, 1998; Cochrane, 2006; Corral, 2008; Donham & Green, 2004; Elrod & Somerville, 2007; Ferrer-Vinent & Carello, 2008; Matthew & Schroeder, 2006; Matthies, 2004; Prucha, Stout, & Jurkowitz, 2005; Thaxton, Faccioli, & Mosby, 2004; Thompson, 2002). However, the existing research does not investigate collaboration utilizing social network analysis from an academic faculty member's teaching social network perspective. Instead the library and education literature explored the influencers affecting academic faculty when they designed or delivered their courses (Auman & Lillie, 2008; Benton & Schillo, 2004; Briggs, 2007; Lindsay, Jeffrey, & Singh, 2009).

Research Problem and Research Questions

The overall research question of the study is: What is the nature of the teaching social networks of academic faculty? The sub-research questions that will be discussed in this paper are: What channels of communication affect academic faculty when they collaborate and design and deliver their courses? To what extent do the channels of communication affect academic faculty? In addressing the sub-research questions this paper will develop an understanding of collaboration from the perspective of academic faculty.

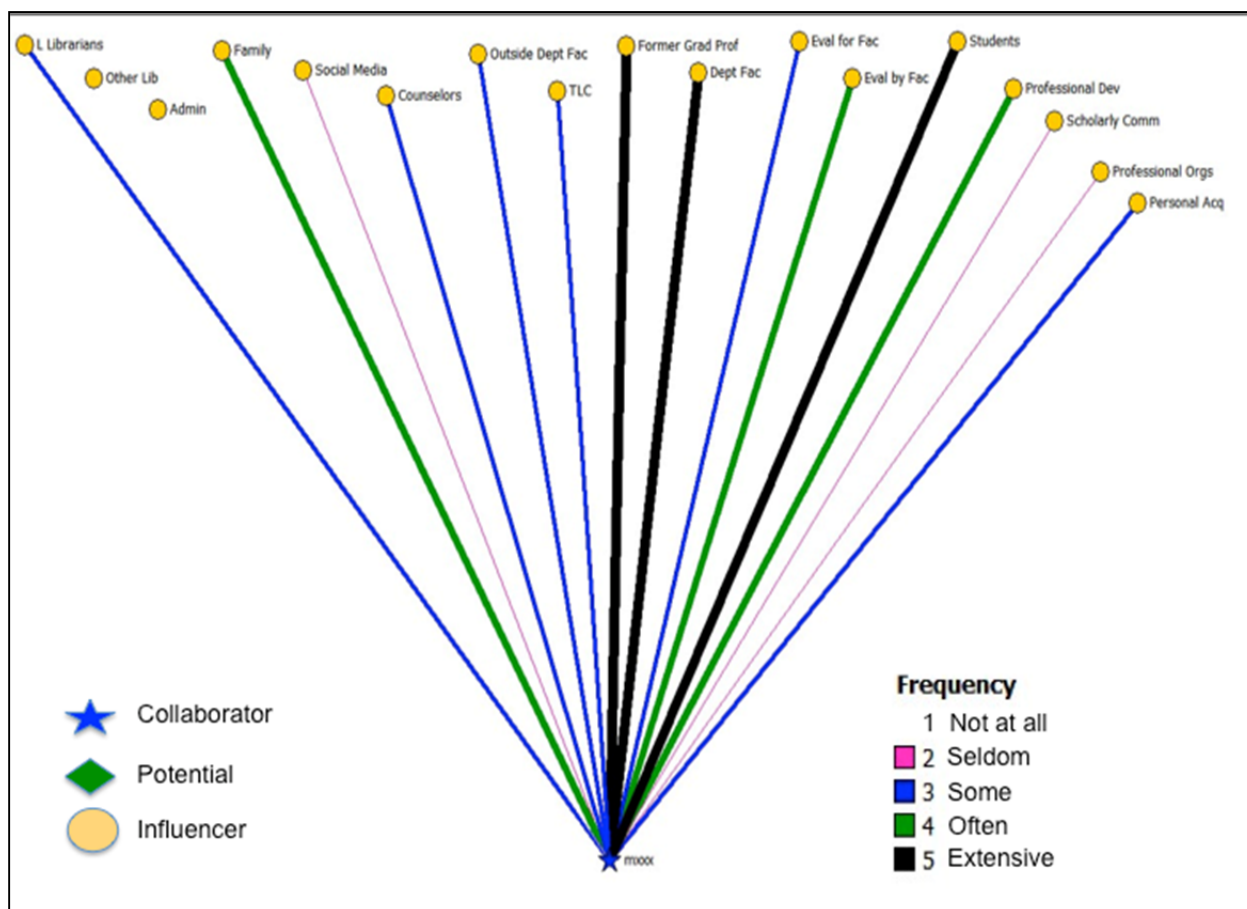


Figure 1 Legend of social network analysis graphs. This figure illustrates a teaching social network for one academic faculty member. The legend of the colors are used in figures 2, 3, 4, and 5 to show the results of the collaborators and potentials and the affect

Methodology

Social network analysis was the quantitative method chosen for this study to examine academic faculty's teaching social network. Social network analysis was appropriate as a methodology for this study because it identified the structure of a social network through sets of people or groups and their relationships that drew them together (Marin & Wellman, June 11, 2009; Tindall & Wellman, 2001; Wasserman & Faust, 1994). Social network analysis examined the relationships between social units like people or groups (Wasserman & Faust, 1994, p. 3). Social network analysis was also described as research into social relationships and the results that occur because of the existence of the relationships (Tindall & Wellman, 2001). A main priority of social network analysis was to develop an understanding of how social relationships support and impede individuals in their actions (Tindall & Wellman, 2001).

Software for social network analysis data

Software was used to analyze the collected social network data. The software used for this study was VisuaLyzer because of the ease of use in creating

social network analysis diagrams. There was an additional analysis done of the Excel file, generated by the survey tool, which summed the results to determine the percentages of academic faculty selecting extensive, often, some, seldom, and not at all for the influencers.

Academic faculty selected the frequency of contact over the last three years (not at all, seldom, some, often, or extensive) for each channel of communication in the list. The channels of communication were included in the teaching social network when the participants chose seldom, some, often or extensive as the frequency. In other words if they chose not at all the influencers were not included in the teaching social network.

Data Collection

This section describes the overall process of gathering and analyzing the social network analysis data. A pre-pilot study and pilot study were completed last year to validate the feasibility of the study and the survey questions. After the pilot studies were completed revisions were incorporated into the main study data collection.

Social Network Analysis

Surveys were used to gather teaching social network relationship data. The surveys contained a list of potential channels of communication that may

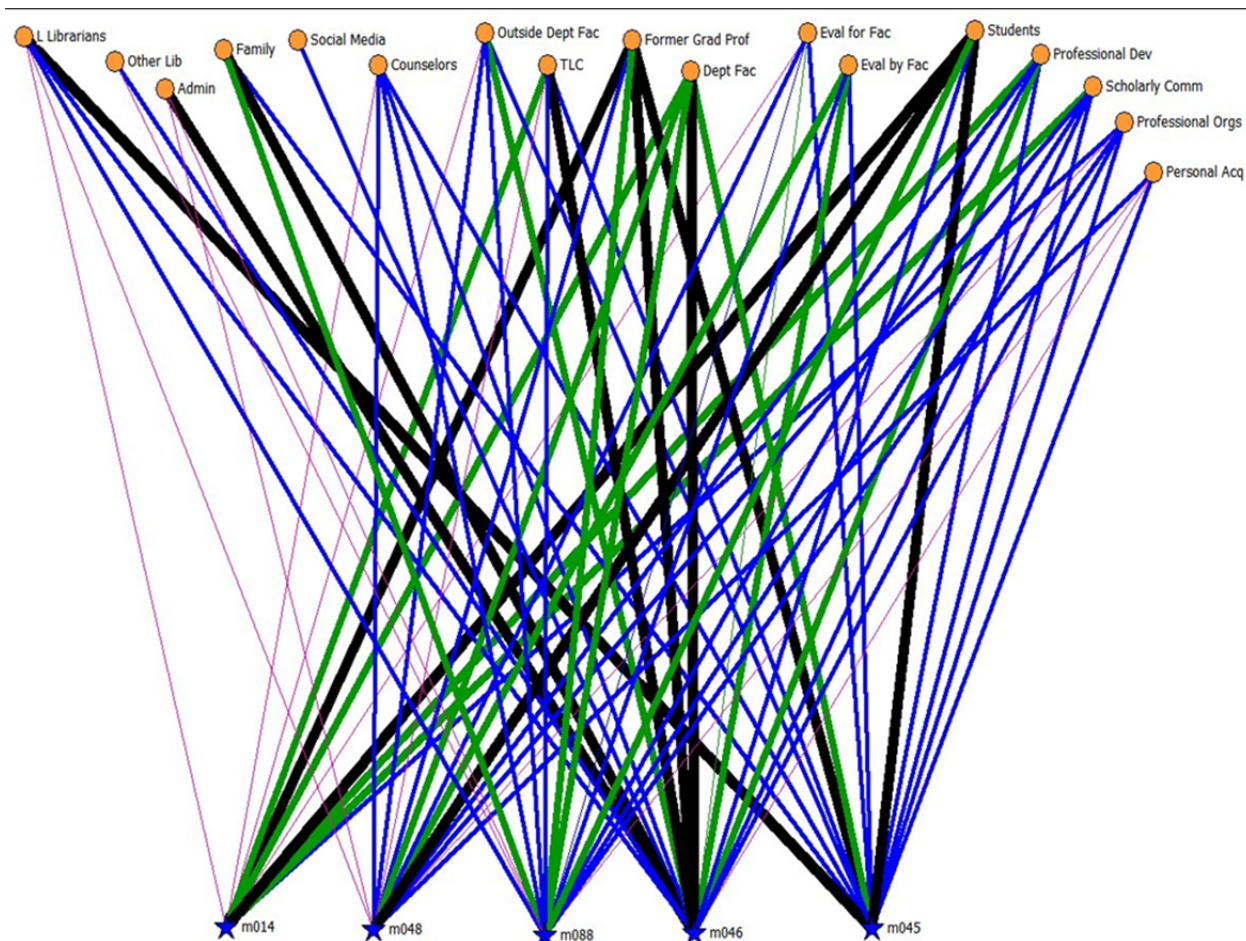


Figure 2 Influencers that affected how (pedagogy) collaborators taught. The thicker lines in the graph display a greater impact by the influencers on academic faculty.

affect academic faculty when they design and deliver their courses. There was also a free-form question at the end of the survey where academic faculty could list any missing channels of communication. The survey was a short questionnaire that was emailed to the participants. See Appendix A for the complete survey.

The survey question was: “Please indicate to what extent in the last three years each of the listed people/information affected how you teach and what you teach. How you teach refers to: pedagogy/methodology, types of assignments, classroom strategies, or classroom activities. What you teach refers to: content, subject matter, or topics. In the table/matrix below, click on the arrow and select not at all, seldom, some, often, or extensive. Your answers in both columns may differ.” The first column was the list of channels of communication that may have affected academic faculty when they designed and delivered their courses. Academic faculty were asked to indicate the frequency of contact with the channel of communication in how they taught (peda-

gogy) and what they taught (course content). The list of channels of communication included in the survey were: administration, family member(s), formal evaluations **by** other faculty members, formal evaluations **for** other faculty members, former graduate professors and coursework, Las Positas College (LPC) counselors (i.e. DSPS students), LPC department faculty, LPC faculty outside of department, LPC librarians, LPC Teaching and Learning Center [instructional technology group], other librarians (public or academic), personal acquaintances, professional development (on campus workshops; state, regional or nation conferences; or webinars), professional/industrial organizations, scholarly and professional communications (books, journal articles, wikis, blogs), social media (email groups, LISTSERVs, Facebook, Myspace, LinkedIn, Chat), and students. This list was brainstormed with the authors, the pre-pilot study, the pilot study participants and confirmed through the literature review. The survey was designed to elicit responses from the participants to describe their teaching social networks.

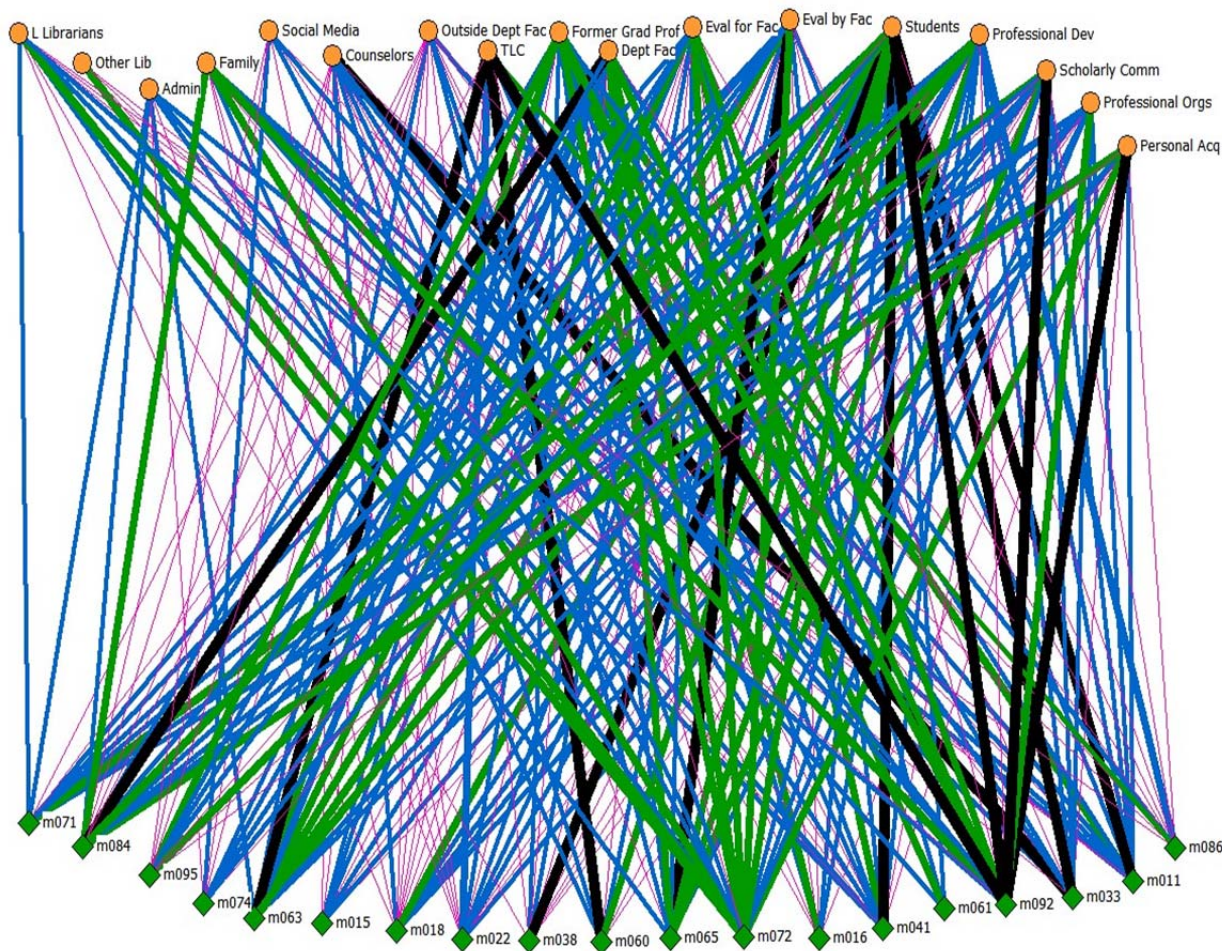


Figure 3 Influencers that affected how (pedagogy) *potentials* taught. The thicker lines in the graph display a greater impact by the influencers on academic faculty.

Participants

Las Positas College (LPC), a community college in Livermore, California was selected to participate in the main study. The surveys were sent to all full-time faculty members. Ninety-seven full-time faculty were emailed the survey, 78 percent of the faculty responded to the survey.

Categories for the type of respondent were established to determine if academic faculty have similar teaching social networks across the groups. Each academic faculty member was associated with a category. Criteria were established for categorizing academic faculty members into four groups: 1) *collaborator*, 2) *cooperator*, 3) *potential* and 4) *non-potential*.

- 1) *Collaborators* were those individuals who work in conjunction with library faculty when they create assignments, assess students, and devise teaching strategies.

- 2) *Cooperators* were those who divide tasks between themselves and library faculty keeping a clear division of responsibilities (Montiel-Overall, 2008). The *cooperators* typically delegate the information literacy component to library faculty by providing an assignment that requires students to locate, evaluate, and utilize information. The library faculty does not have any input into the creation of the assignment.
- 3) *Potentials* were those who did not work with library faculty when developing their curriculum but taught courses with potential for collaboration. The *potentials'* courses were determined by reviewing the library and education literature.
- 4) *Non-potentials* were those who do not work with library faculty and teach skills-based courses (e.g. graphics design).

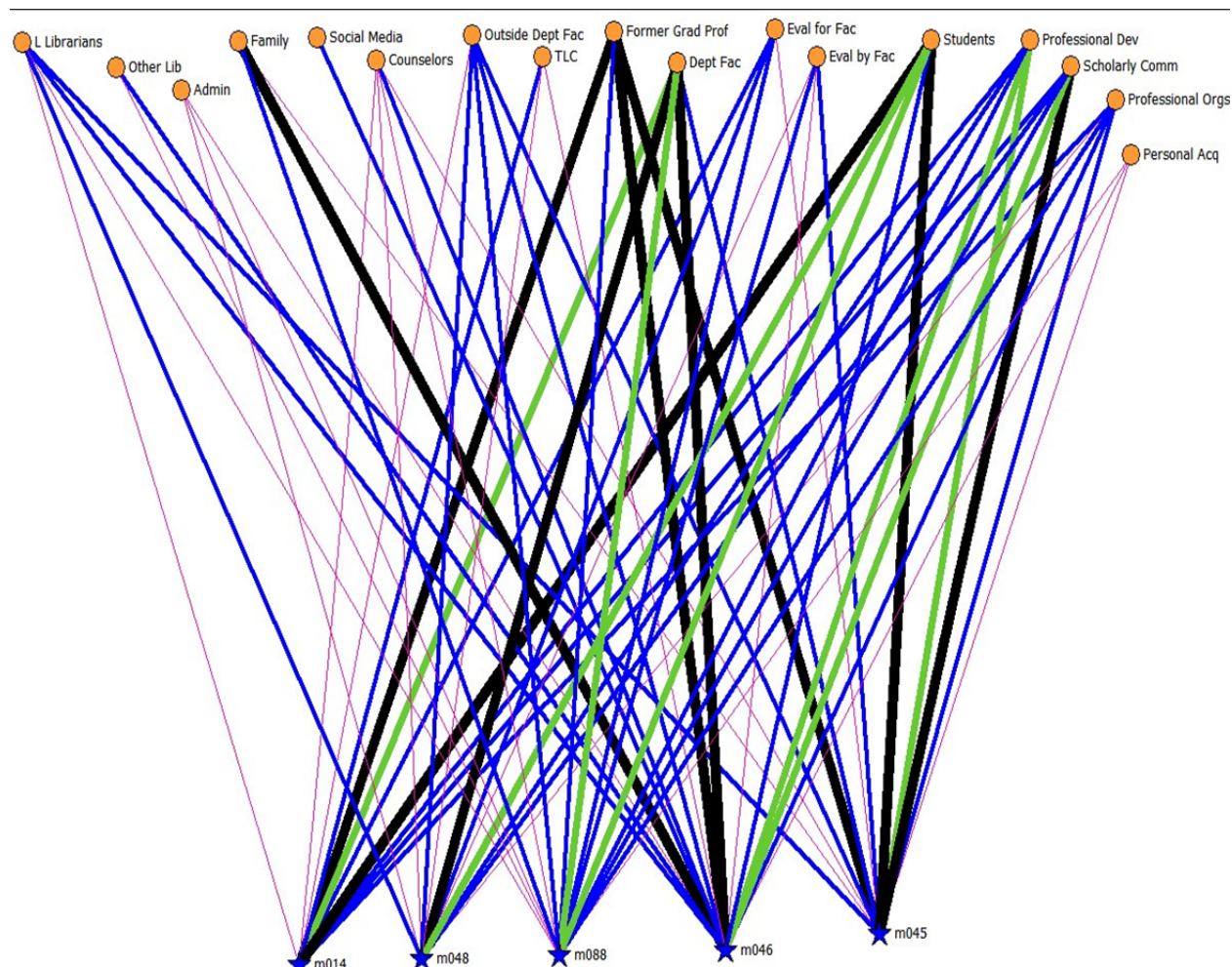


Figure 4 Influencers that affected what (course content) *collaborators* taught. The thicker lines in the graph display a greater impact by the influencers on academic faculty.

After initial review of the data the most distinct differences in the data existed between the *collaborators* and *potentials* therefore the *cooperators* and *non-potentials* will not be discussed in this paper.

Preliminary Results of Social Network Analysis Survey for Collaborators and Potentials

This section will discuss the preliminary findings about academic faculty identified as *collaborators* and *potentials* that completed the survey. There will be a discussion of academic faculty responses in relation to how the channels of communication affected how they taught (pedagogy). Afterwards there will be a discussion of academic faculty responses in relation to what they taught (course content). The channels of communication will also be referred to as influencers in this section.

Analysis of how influencers affect academic faculty in how they taught (pedagogy)

Collaborators and *potentials*' teaching social networks were compared in "how" they taught (pedagogy). After initial review of the data the most distinct differences in the data existed between the *collaborators* and *potentials* therefore the *cooperators* and *non-potentials* will not be discussed in this paper. *Collaborators* were affected more than *potentials* by their identified influencers. When asked to what extent in the last three years each of the listed people/information affected how they taught, 30.6 percent of *collaborators* selected extensive or often. Only 15.2 percent of the *potentials* made the same selection. In contrast, 84.8 percent of the *potentials* selected some, seldom, or not at all while 69.4 percent of the *collaborators* made the same selection. Even though the percentage of academic faculty that extensively used their influencers was low, these

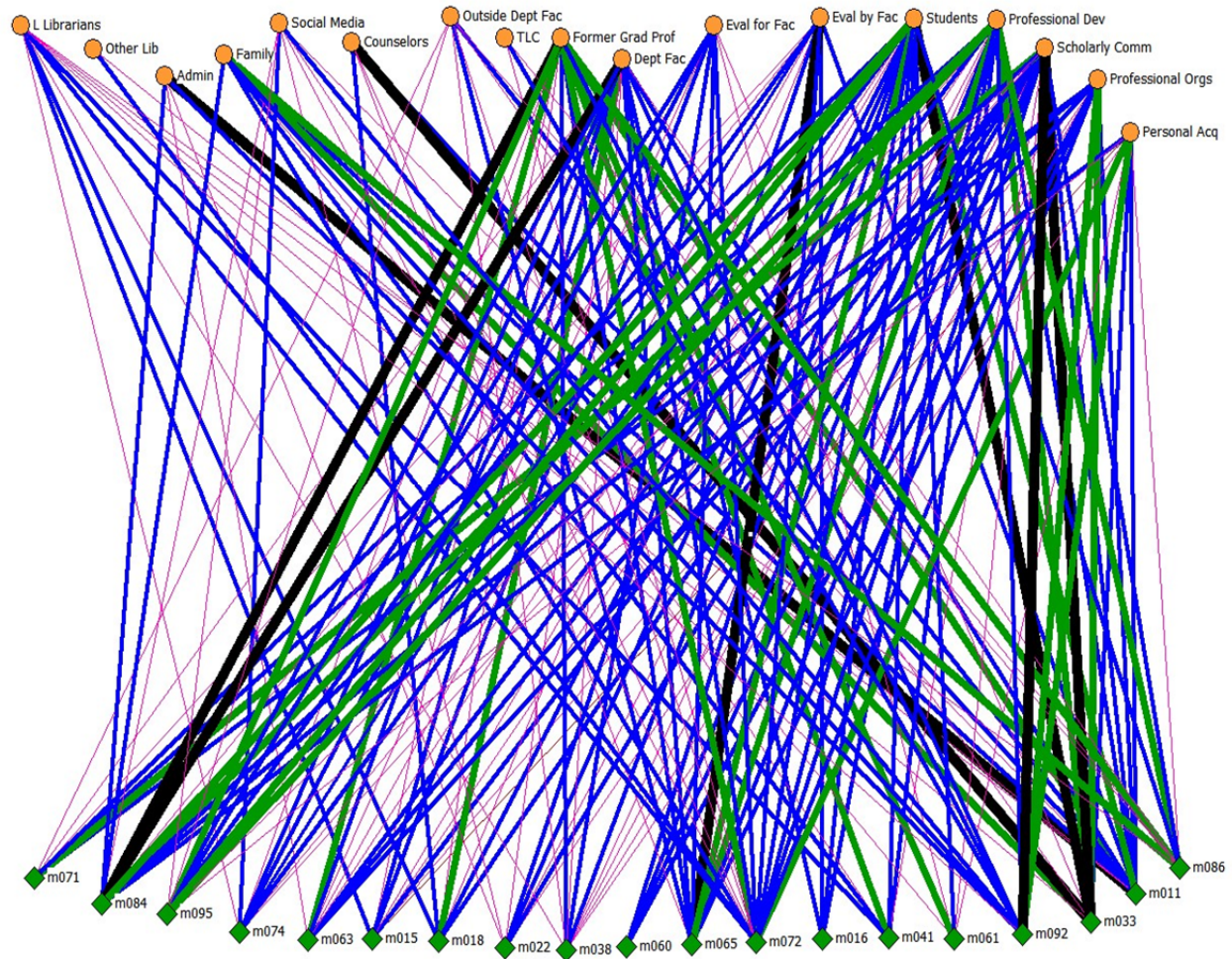


Figure 5 Influencers that affected what (course content) *potentials* taught. The thicker lines in the graph display a greater impact by the influencers on academic faculty.

results show the *collaborators* were more affected by their influencers than the *potentials* in how they taught.

The social network analysis graphs were created with VisualLyzer using the data retrieved from the survey for *collaborators* and *potentials*. Figure 1 shows the teaching social network for an academic faculty member and is the legend for the colors. The influencers were displayed across the top of the graphs and the survey participants were displayed across the bottom of the graphs. The influencers were classified with a circle shape and yellow color, the *collaborators* were represented with a star shape and blue color, and the *potentials* were classified with a diamond shape and green color. The frequency (or relationship/link) colors refer to how often in the last three years the *collaborators/potentials* were affected 2=seldom, 3=some, 4=often, and

5=extensive. The thicker lines reveal a stronger affect by the influencer on the respondent. Extensive (black) lines have the thickest lines, often (green) and some (blue) have progressively thinner lines, and seldom (pink) has the thinnest line. “Not at all” was not depicted by a color because the influencer was not a part of the teaching social network. Figure 2 shows the results for the people and information (influencers) that affected how *collaborators* taught their courses. Figure 3 shows the results for the people and information (influencers) that affected how *potentials* taught their courses.

The graphs show similarities and differences between *collaborators* and *potentials* in how academic faculty members taught. Both *collaborators* and *potentials* were the most influenced by: students and former graduate professors and coursework. A difference that

emerged suggests that *collaborators* were most influenced by department faculty and *potentials* were most influenced by professional development. The least influential to both *collaborators* and *potentials* were: social media, other librarians (public or academic), and administration. In addition, *collaborators* were least influenced by personal acquaintances and *potentials* were least influenced by LPC library faculty.

Analysis of how influencers affect academic faculty in what they taught (content)

Collaborators and *potentials*' teaching social networks were compared in "what" they taught (course content). *Collaborators* were affected more than *potentials* by their identified influencers. When asked to what extent in the last three years each of the listed people/information affected what they taught, 18.2 percent of the *collaborators* selected extensive or often. Only 9.9 percent of the *potentials* made the same selection. In contrast, 90.1 percent of the *potentials* selected some, seldom, or not at all while 81.8 percent of the *collaborators* made the same selection. Even though the percentage of academic faculty that extensively used their influencers was low, these results show the *collaborators* were more affected by their influencers than the *potentials* in what they taught.

The social network analysis graphs were created with VisualLyzer using the data retrieved from the pilot study survey for *collaborators* and *potentials*. Refer to Figure 1 for the legends of the colors. The influencers were displayed across the top of the graphs and the survey participants were displayed across the bottom of the graphs. The influencers were classified with a circle shape and yellow color, *collaborators* were represented with a star shape and blue color, and the *potentials* were classified with a diamond shape and green color. The frequency (or relationship/link) colors refer to how often in the last three years the *collaborators/potentials* were affected 2=seldom, 3=some, 4=often, and 5=extensive. The thicker lines reveal a stronger affect by the influencer on the respondent. Extensive (black) lines have the thickest lines, often (green) and some (blue) have progressively thinner lines, and seldom (pink) has the thinnest line. Figure 4 shows the people and information (influencers) that affected what (course content) for *collaborators*. Figure 5 shows the people and information (influencers) that affected what (course content) for *potentials*.

The graphs show similarities and differences between *collaborators* and *potentials* in what academic faculty members taught. Both *collaborators* and *potentials* were the most influenced by: students, professional development,

and former graduate professors and coursework. *Potentials* were also heavily influenced by scholarly communications. The least influential to both *collaborators* and *potentials* were administration and other librarians. A difference that emerged suggests that *collaborators* were least influenced by social media and personal acquaintances and *potentials* were least influenced by the Teaching and Learning Center (instructional technology group).

Discussion and Implications

The findings from the survey describing academic faculty's teaching social network illustrated the majority of academic faculty were not highly influenced in designing and delivering their courses. Both *collaborators* and *potentials* were affected more often in how they taught (pedagogy) than what they taught (course content). The Las Positas College library faculty affected the *collaborators* more than the *potentials* in both how and what they taught. The preliminary findings suggest that the academic faculty that collaborated with library faculty were more likely to be influenced when they were designing and delivering their courses than the *potentials*. The channels of communication derived from the literature review (Auman & Lillie, 2008; Benton & Schillo, 2004; Briggs, 2007; Lindsay, et al., 2009) and the pilot study confirmed there was an influence on academic faculty. The strengths of utilizing social network analysis are that a description of academic faculty's teaching social network is provided and the frequency academic faculty were influenced by the channels of communication is revealed in the analysis. The major weakness of social network analysis was that the question of how the influencers affected academic faculty in their teaching social network was not revealed.

The interviews have provided more clarification of how the channels of communication influenced academic faculty. The preliminary discoveries uncovered by the interviews revealed when library faculty were included in academic faculty's teaching social network the library faculty provided the information literacy education components of the courses. Additionally the interview data revealed that some of the academic faculty categorized as *cooperators* (delegating the information literacy components) analyzed how the library faculty taught their portion of the course and incorporated changes from the library faculty into the assignments. When channels of communication were included in teaching social networks new ideas and new ways of presenting material to the students were the primary outcomes of the influence of academic faculty. This data needs further analysis in a future paper.

Conclusion

There is a lot known about collaboration between library and academic faculty from the library faculty perspective, but there is little known about academic faculty members' teaching social networks. Understanding academic faculty's teaching social network is important because the academic faculty perspective of collaboration has not been explored extensively in the literature. The preliminary results of my survey describe the teaching social network of academic faculty identified as *collaborators* and *potentials*. The preliminary results have shown that the *collaborators* were more affected by their channels of communications than the *potentials*. Both *collaborators* and *potentials* were more affected in how they taught (pedagogy) than what they taught (course content). This may suggest library faculty should be more focused on collaborating in the pedagogical process. The ef-

fect of LPC librarians on academic faculty showed a stronger influence on *collaborators* than *potentials*.

The strengths of utilizing social network analysis have been shown to be a) that a description of academic faculty's teaching social network is provided and b) that the level of frequency academic faculty were influenced by the channels of communication is revealed in the analysis. The major weakness of social network analysis was that the findings were unable to reveal insights into the question of how the influencers affected academic faculty in their teaching social network. In order to address this weakness of social network analysis, 26 interviews of academic faculty were completed to gain a better understanding of how the influencers affected academic faculty. Ways for library faculty to become a more integral part of academic faculty's teaching social network will be explored for my final dissertation.

Appendix A: Main Study Survey

Faculty Collaboration: A Social Network Analysis - Main Study		Exit this survey
2.		
<p>1. Please indicate to what extent in the last three years each of the listed people/information affected how you teach and what you teach. How you teach refers to: pedagogy/methodology, types of assignments, classroom strategies, or classroom activities. What you teach refers to: content, subject matter, or topics. In the table/matrix below, click on the arrow and select not at all, seldom, some, often, or extensive. Your answers in both columns may differ.</p>		
	HOW you teach	WHAT you teach
Administration	<input type="text"/>	<input type="text"/>
Family member(s)	<input type="text"/>	<input type="text"/>
Formal evaluations by other faculty members	<input type="text"/>	<input type="text"/>
Formal evaluations for other faculty members	<input type="text"/>	<input type="text"/>
Former graduate professors and coursework	<input type="text"/>	<input type="text"/>
LPC counselors (i.e. DSPS students)	<input type="text"/>	<input type="text"/>
LPC department faculty	<input type="text"/>	<input type="text"/>
LPC faculty outside of department	<input type="text"/>	<input type="text"/>
LPC librarians	<input type="text"/>	<input type="text"/>
LPC Teaching and Learning Center (TLC, formerly known as Innovation Center)	<input type="text"/>	<input type="text"/>
Other librarians (public or academic)	<input type="text"/>	<input type="text"/>
Personal acquaintances	<input type="text"/>	<input type="text"/>
Professional development (on campus workshops; state, regional or nation conferences; or webinars)	<input type="text"/>	<input type="text"/>
Professional/Industrial organizations	<input type="text"/>	<input type="text"/>
Scholarly and professional communications (books, journal articles, wikis, blogs)	<input type="text"/>	<input type="text"/>
Social media (Email groups, LISTSERVs, Facebook, Myspace, LinkedIn, Chat)	<input type="text"/>	<input type="text"/>
Students	<input type="text"/>	<input type="text"/>
Other (please specify)		
<input type="text"/>		

References

- ACRL Information Literacy Advisory Committee. (May 22, 2008). Collaborating with Teaching Faculty. Retrieved October 7, 2008, from <http://www.ala.org/ala/mgrps/divs/acrl/issues/infolit/infolitresources/collaboration/collaboration.cfm>
- ACRL Information Literacy Advisory Committee. (September 29, 2006). Introduction to information literacy. from <http://www.ala.org/ala/mgrps/divs/acrl/issues/infolit/overview/intro/index.cfm>
- American Library Association Presidential Committee on Information Literacy. (1989). Final report. from <http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm>
- Andretta, S., Pope, A., & Walton, G. (2008). Information Literacy Education in the UK: Reflections on perspectives and practical approaches of curricular integration. *Communications in Information Literacy*, 2(1), 36-51.
- Arp, L., Woodard, B. S., Lindstrom, J., & Shonrock, D. D. (2006). Faculty-Librarian Collaboration to Achieve Integration of Information Literacy. *Reference & User Services Quarterly*, 46(1), 18-23.
- Auman, A., & Lillie, J. (2008). An evaluation of team-teaching models in a media convergence curriculum. [Feature Article]. *Journalism and Mass Communication Educator*, 62(4), 360-375.
- Barnard, A., Nash, R., & O'Brien, M. (2005). Information Literacy: Developing Lifelong Skills Through Nursing Education. [Feature Article]. *Journal of Nursing Education*, 44(11), 505-510.
- Benton, C. J., & Schillo, J. M. (2004). School and university collaboration partners: A model for collegial support of literacy and professional development. [Feature Article]. *Action in Teacher Education*, 25(4), 30-37.
- Bowler, M., & Street, K. (2008). Investigating the efficacy of embedment: Experiments in information literacy integration. *Reference Services Review*, 4, 438-449.
- Briggs, C. L. (2007). Curriculum Collaboration: A Key to Continuous Program Renewal. [Feature Article]. *The Journal of Higher Education*, 78(6), 676-711.
- Bruce, C. (1997). *The seven faces of information literacy*. Adelaide, Australia: Auslib Press.
- Bruce, C. (2004). Information literacy as a catalyst for educational change: A background paper. Paper presented at The 3rd International Lifelong Learning Conference. Retrieved from http://eprints.qut.edu.au/4977/1/4977_1.pdf
- Callison, R., Budny, D., & Thomes, K. (2005). Library Research Project for First-Year Engineering Students: Results from Collaboration by Teaching and Library Faculty. *Reference Librarian*, 43(89/90), 93-106.
- Carter, E. W., & Daugherty, T. K. (1998). Library instruction and psychology - a cooperative effort, *Technical Services Quarterly* (Vol. 16, pp. 33-41).
- Chartered Institute of Library and Information Professionals. (2003). Information literacy: Definition. from <http://www.cilip.org.uk/get-involved/advocacy/learning/information-literacy/Pages/definition.aspx>
- Cochrane, C. (2006). Embedding information literacy in an undergraduate management degree: Lecturers' and students' perspectives. *Education for Information*, 24(2/3), 97-123.
- Corrall, S. (2008). Information literacy strategy development in higher education: An exploratory study. *International Journal of Information Management*, 28(1), 26-37.
- Donham, J., & Green, C. W. (2004). Perspectives on ... developing a culture of collaboration: librarian as consultant. *The Journal of Academic Librarianship*, 30(4), 314-321.
- Elrod, S. L., & Somerville, M. M. (2007). Literature-based scientific learning: A collaboration model. *The Journal of Academic Librarianship*, 33(6), 684-691.
- England, L. E., & Pasco, R. J. (2004). Information Literacy-- Making It Real! *Community & Junior College Libraries*, 12(3), 67-72.
- Ferrer-Vinent, I. J., & Carello, C. A. (2008). Embedded Library Instruction in a First-Year Biology Laboratory Course. *Science & Technology Libraries*, 28(4), 325-351.
- Gandhi, S. (2004). Faculty-librarian collaboration to assess the effectiveness of a five-session library in-

- struction model. *Community & Junior College Libraries*, 12(4), 15-48.
- Haycock, K. (2007). Collaboration: Critical success factors for student learning. *School Libraries Worldwide*, 13(1), 25-35.
- Lewis, K. O., & Sincan, M. (2009). International co-teaching of medical informatics for training-the-trainers in content and distance education. *Journal of Asynchronous Learning Networks*, 13(2), 33-47.
- Li, H. (2007). Information Literacy and Librarian-Faculty Collaboration: A Model for Success, *Chinese Librarianship* (pp. 2).
- Lindman, J., & Tahamont, M. (2006). Transforming Selves, Transforming Courses: Faculty and Staff Development and the Construction of Interdisciplinary Diversity Courses. *Innovative Higher Education*, 30(4), 289-304.
- Lindsay, G. M., Jeffrey, J., & Singh, M. (2009). Paradox of a graduate human science curriculum experienced online: A faculty perspective. [Feature Article]. *The Journal of Continuing Education in Nursing*, 40(4), 181-186.
- Mackey, T. P., & Jacobson, T. E. (2005). Information literacy: A collaborative endeavor. *College Teaching*, 53(4), 140-144.
- Marin, A., & Wellman, B. (June 11, 2009). Social network analysis: An introduction. from <http://www.chass.utoronto.ca/~wellman/publications/newbies/newbies.pdf>
- Marshall, J., & Foster, N. (2002). "Between belonging": Habitus and the migration experience. [Feature Article]. *The Canadian Geographer*, 46(1), 63-83.
- Matthew, V., & Schroeder, A. (2006). The embedded librarian program: Faculty and librarians partner to embed personalized library assistance into online courses. *Educause Quarterly*(4), 61-65.
- Matthies, B. (2004). The road to faculty-librarian collaboration. *Academic Exchange Quarterly*, 8(4), 135-140.
- Montiel-Overall, P. (2008). Teacher and librarian collaboration: A qualitative study. *Library & Information Science Research*, 30(2), 145-155.
- Prucha, C., Stout, M., & Jurkowitz, L. (2005). Information Literacy Program Development for ESL Classes in a Community College. *Community & Junior College Libraries*, 13(4), 17-39.
- Rabinowitz, C. (2000). Working in a vacuum: A study of the literature of student research and writing. *Research Strategies*, 17(4), 337-346.
- Ribeiro, O., Paúl, C., & Nogueira, C. (2007). Real men, real husbands: Caregiving and masculinities in later life. *Journal of Aging Studies*, 21(4), 302-313.
- Saunders, L. (2008). Perspectives on Accreditation and Information Literacy as Reflected in the Literature of Library and Information Science. *The Journal of Academic Librarianship*, 34(4), 305-313.
- Sciammarella, S. (2009). Making a Difference: Library and Teaching Faculty Working Together to Develop Strategies in Dealing with Student Plagiarism. *Community & Junior College Libraries*, 15(1), 23-34.
- Thaxton, L., Faccioli, M. B., & Mosby, A. P. (2004). Leveraging collaboration for information literacy in psychology. *Reference Services Review*, 32(2), 185-189.
- Thompson, G. B. (2002). Information literacy accreditation mandates: What they mean for faculty and librarians. *Library Trends*, 51(2), 218.
- Tindall, D. B., & Wellman, B. (2001). Canada as Social Structure: Social Network Analysis and Canadian Sociology. *Canadian Journal of Sociology / Cahiers canadiens de sociologie*, 26(3), 265-308.
- Wasserman, S., & Faust, K. (1994). *Social Network Analysis: Methods and Applications*. New York: Cambridge University Press.
- Weedman, J. (1992). Informal and Formal Channels in Boundary-Spanning Communication. *Journal of the American Society for Information Science*, 43(3), 257-267.
- Wijayasundara, N. D. (2008). Faculty-library collaboration: A model for University of Colombo. *The International Information & Library Review*, 40(3), 188-198.
- Winner, M. C. (1998). Librarians As Partners In The Classroom: An Increasing Imperative, *Reference Services Review* (Vol. 26, pp. 25): Emerald.

Zhang, W. (2001). Building partnerships in liberal arts education: library team teaching, *Reference Services Review* (Vol. 29, pp. 141-149).

Zohar, D., & Tenne-Gazit, O. (2008). Transformational leadership and group interaction as climate antecedents: a social network analysis. *The Journal of Applied Psychology*, 93(4), 744-757.